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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,300	12/10/1999	THOMAS L. MCMAHON	MS1-365US	8699

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EXAMINER

SENF, BEHROOZ M

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 04/25/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/458,300

Applicant(s)

MCMAHON, THOMAS L. ✓

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-81 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 3 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8 – 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 8, line 10 – 11, the recited limitation of "wherein the aspect ratio of the first image differs from the aspect ratio of the base layer" is confusing. How can the aspect ratio of the image derived from its own source (i.e. the base layer) have different aspect ratio? Please clarify.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 7, 12 – 19, 21 – 30, 33, 36 – 40, 42 – 54 and 70 – 81, are rejected under 35 U.S.C. 102(b) as being anticipated by Koster (US 5,510,787).

Regarding claims 1 and 21, 36, 42, Koster '787 discloses a method of encoding a source image (i.e. abstract, figs. 1a-1b), comprising:

Generating a base layer representing a low-resolution portion of the source image (i.e. fig. 1b), wherein the base layer has an associated aspect ratio (i.e. col. 3, lines 13+), and high-resolution portion of the source image (i.e. fig. 1a), wherein the enhancement layer has an associated aspect ratio (i.e. col. 3, lines 9+).

Furthermore, regarding the decoding process as claimed (claim 21), (i.e. figs. 2, unit 90, abstract).

Regarding claims 2 – 6, 22 – 27, 37 – 38, 43, 51 – 52 and 71 – 72, Koster '787 discloses the aspect ratio associated with different TV standards (i.e. col. 2, lines 60+ and col. 3, lines 5+), further regards to low-pass filtering (i.e. fig. 1b, unit 2, col. 8, lines 21+).

Regarding claim 7, generating an enhancement layer includes subtracting a portion of the base layer from a corresponding portion of the source image (i.e. fig. 1a, unit 16, col. 9, lines 30+).

Regarding claims 12 and 44, Koster '787 discloses filtering means (i.e. col. 8, lines 21+), and using high-pass filter for generating the enhancement layer is an inherent feature of the filtering means.

Regarding claims 16, 17 and 39, limitations claimed transmitting the base layer to an image decoding system using a first transmission medium (reads on fig. 1a, and fig. 2) and transmitting the enhancement layer to the image decoding system using a second transmission medium (reads on fig. 1b, and fig. 2).

Regarding claims 18, 19 and 49, Koster '787 discloses storage medium (i.e. fig's. 1a and 1b, memory means 20 and 40).

Regarding claims 13 and 29, combining the base layer and the enhancement layer to generate high-resolution image (i.e. fig. 1a, unit 6).

Regarding claims 14 and 15, transmitting the base layer and the enhancement layer to an image decoding system (i.e. fig. 2, col. 2, lines 25+), transmitting only the base layer (i.e. col. 2, lines 28+).

Regarding claims 28, 74, 75, Koster '787 discloses process of communicating, input signal going through the process of encoding and decoding and transport to the display device or television (i.e. fig's 1 – 2, col. 2, lines 60+).

Regarding claim 30, wherein the method is executed by a television (i.e. abstract).

Regarding claim 33, first layer received at a first time and second layer received at a second time (reads on fig. 1a, time base multiplexer 6).

Regarding claim 40, base layer is transmitted using a first transmission format (i.e. aspect ratio, col. 3, lines 14+) and the enhancement layer is transmitted using a second transmission format (i.e. aspect ratio, col. 3, lines 9+).

Regarding claim 45, enhancement layer generator includes an image extractor to extract a portion of the base layer and a differencing module to subtract the extracted portion of the base layer (reads on fig. 1a, subtraction circuit 16 and first data processing means unit 10).

Regarding claims 46 - 48, Koster '787 discloses transmitter that transmits the base layer and the enhancement layer and only the base layer to an image decoding system (i.e. fig. 1, unit 6, col. 2, lines 25+).

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Regarding claim 50, the limitations claimed are substantially similar to claim 21, and is the apparatus of the method claimed, therefore the grounds for rejecting claim 21 also apply here.

Regarding claim 53, the whole process of Koster '787 is based on television.

Regarding claim 54, receiver coupled to the base layer decoder and the enhancement layer decoder to receive a transport stream containing a base and an enhancement layer (reads on fig. 2, receiver decoder 90).

Regarding claims 73, 76 and 78, the limitations as claimed are substantially similar to claims 21 and 29, therefore the grounds for rejecting claims 21 and 29 also apply here.

Regarding claims 77, 79 and 80 – 81, the limitation as claimed are substantially similar to claims 23 and 27, therefore the grounds for rejecting claims 23 and 27 also apply here.

Regarding claim 70, limitations as claimed are substantially similar to claims 1 and 29, and has been discussed above, therefore the grounds for rejecting claims 1 and 29 also apply here.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claim 32, are rejected under 35 U.S.C. 103(a) as being unpatentable over Koster (US 5,519,787) in view of Goodhill et al. (US 2002/0021412).

Regarding claim 32, Koster '787 teaches layer coding and decoding (i.e. abstract) and generating first and second layer representing high and low resolution (i.e. fig. 1a-1b, abstract) and decoding first and second layer representing high and low resolution (i.e. fig. 2, abstract).

Koster '787 fails to explicitly teach correcting an anamorphic squeeze in the first layer.

However, the above mentioned claim limitation as claimed is well-known in the art as evidenced by Goodhill '412, in particular Goodhill '412 teaches anamorphic process (i.e. page 3, section 0022).

In view of the above, having the system of Koster '787 and then given the well established teaching of Goodhill '412, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Koster '787 as taught by Goodhill '412, since Goodhill '412 states in page 3, section 0022, that such a modification squeeze and correct the aspect ratio.

8. Claims 20, 31 – 32, 34 - 35, 41 and 55 – 69, are rejected under 35 U.S.C. 103(a) as being unpatentable over Koster (US 5,519,787).

Regarding claims 20, 35, 41, 55, 58, 59, 61 – 62 and 65, Koster '787 fails to explicitly teach computer readable media having stored thereon a computer program. However, It would have been obvious to one having ordinary skill in the art to realize that the system of Koster '787 is capable of software implementation.

Regarding claims 56 – 57 and 66 - 67, the limitations claimed are substantially similar to claims 4 – 5, therefore the grounds for rejecting claims 4 – 5 also apply here.

Regarding claims 31 and 34, Koster '787 teaches the process of encoding and decoding of the base layer and enhancement layer through different channel (upper and lower channels) and transporting, it is obvious that the transportation process can be a wireless transportation or an alternative media (physical medium, storage media), which is an obvious design choice and is not inventive.

Regarding claim 60, limitation as claimed "comparing a portion of the first layer with a corresponding portion of the source image" reads on fig. 1a, units 16 and 10, also col. 6, comparison result lines 10+ of Koster '787.

Regarding claims 63 and 64, the limitations as claimed are substantially similar to claims 18 – 19, and has been discussed above, therefore the grounds for rejecting claims 18 – 19, also apply here.

Regarding claims 68 and 69, limitations as claimed has been discussed on claim 28, therefore the grounds for rejecting claim 28, also apply here.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure;

Jain et al. (US 6,360,234) video cataloger system with synchronized encoders.

Katata et al. (US 5,963,257) video coding device and video decoding device.

Miyatake et al. (US 2001/0005428) video retrieval method and apparatus.

9. Any inquiry concerning this communication or earlier communications

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from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. *[Signature]*

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